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SCHOOL LIFE

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No. 3



"A garden for every child—Every child in a garden."

GARDEN ARMY PLANS FOR 1920 UNDER WAY

Needs More Important Even Than During War—To Increase Educational Value

Spurred on by the assertions of economists throughout the world that production is the most urgent need of the hour, officers in charge of the United States School Garden Army, which enlisted a million boys and girls in the war time and two million and a half last year, have perfected plans to make the summer of 1920 surpass both preceding years in number of children enrolled in home gardens and in amount of land cultivated and products harvested, and in aroused interest in everything that comes from healthful work on the soil.

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In an announcement covering the work for 1920 Director John L. Randall says:

"With the coming of a new year the problems that confront us are to increase the numbers in the United States School Garden Army to make the garden work more permanent, and to increase its educational value. The motto of the Garden Army—'A garden for every child—every child in a garden'—can only be realized when gardening becomes a definite part of school work.

"The President recognized the value of school-supervised gardening by making it a productive line of defense during the period of the Nation's need. Congress has appreciated the service of garden leaders to the country and has recognized the permanent value of this work by granting an appropriation to

continue the United States School Garden Army. This is a work not for ourselves or any organization, but one devoted in a spirit of service to the education of children.

Educational Value

"City children will form habits of industry and regularity by utilizing their energies on the backyards and vacant lots that are now largely unproductive. School-supervised home gardening requires only a limited amount of school time, but it should have as definite a place and credit as any other school subject. As a practical out-of-school-hour subject gardening admits of the widest kind of correlation with other studies. There is no school subject from which more real knowledge may be gained of science, of art, of life's relations than from dealing with living, growing plants.

Children Produce Real Wealth

"In his message to the Sixty-sixth Congress (December 2, 1919), the President, in speaking of the American farmer, said: 'He indispensably helped to win the war. But there is now scarcely less need in increasing the production in food and the necessities of life. I ask Congress to consider means of encouraging effort along these lines.'

"The same fact is given great prominence in the statement of the United States Council of National Defense on October 6, 1919:

"The United States Council of National Defense, composed of the Secretaries of War, Navy, Interior, Agriculture, Commerce, and Labor, has made a careful investigation of the high-cost-of-living problem and finds that the Nation's productive powers have not been fully utilized since the armistice.

"That too few goods, notably the necessities of life, have been produced.

"The council believes that the remedies for the situation are:

"To produce more goods, and to produce them in proportion to the needs of the people."

"Food produced in the city will not require transportation and garden foods will reach the table in the most edible condition. The value of the garden products of an individual child may be small, but multiplied by the production of millions of children the result will add materially to the Nation's wealth. Boys and girls who are now consumers only may become producers and helpers in the real economy of the home."



DEPARTMENT OF THE INTERIOR BUREAU OF EDUCATION

This certificate is awarded by the United States School Garden Army

who has given satisfactory evidence that—has completed a successful garden season, according to prescribed requirements Given under our hands and seals at the City of Washington, the—day of—A.D. and the independence of the United States the—

M. L. H. H.

Secretary of the Int. Sec.

P. P. Clayton

Commissioner of Education

J. S. Ramsdell

Director U.S. School Garden Army

Certificate granted to successful school-home gardeners by the United States Bureau of Education.

VIE WITH EACH OTHER IN MAKING GARDEN RECORDS.

Cities and Towns Show What Garden Idea Can Do in Education—Financial Returns Reach \$48,000,000—Significant Work in Southern Cities.

The 1919 record of the United States School Garden Army reveals that the qualities of pluck, perseverance, and "stick-to-it-iveness" were demonstrated in almost the same degree by the children of every section—from New York City, where 60,654 children raised garden products worth \$715,178.71, to the quiet little mountain town of Montezuma, Colo., where the garden flag waves over "the Great Divide," and from Minneapolis, Minn., where a 13-year-old lad produced garden stuffs at the rate of \$3,761 per acre, to Corpus Christi, Tex., where the children combated successfully the devastation of storm and tidal wave.

Although the financial returns of school-supervised gardening—\$48,000,000 in 1919—sound sufficiently impressive in the aggregate, the 50,000 garden teachers of the United States are a unit in believing that the lessons of self-government, organization, individual responsibility, thrift, and community effort which the children have gained from their garden work have been far above all tangible results. Nevertheless financial results are important, and a nation-wide review of the tangible results of school-supervised gardening can not fail to be of significance to those who have co-operated by furnishing money assistance and awards, trophies, and prizes.

How the \$48,000,000 Was Achieved.

Ready markets, steady labor, and no transportation problems, all of which are the accompaniment of home gardens, played their parts in bringing about the production of vegetables to the estimated value of \$48,000,000. There was little guesswork in arriving at results, inasmuch as the children were required to keep records of the cost of production, these costs later being subtracted from the gross returns.

On the garden-record cards the children listed the cost of seeds, fertilizers, plowing, and such other outlay as was necessary. A fixed sum per hour represented the labor charge, but although the work of the children was as successful in bringing the garden crops to harvest as any adult labor would have been, the amount "charged off" to labor costs was nominal.

The total value of the garden products in different cities varied greatly because of climatic conditions, amount of land available for gardening, and adverse weather conditions. But despite such drawback as storm and drouth, the children's work in practically every instance was crowned with success. Intensive cultivation was called into play to offset dry periods, and although replanting was necessary at times, the children never faltered. In brief, the children learned "to make such unpleasant effort as life later on is sure to require of them."



Earth-mother greets Columbia in this garden pageant. Garden Army work lends itself to pageantry.

An Army of 90,000 in Chicago.

Chicago reports 90,000 children enrolled in garden work who produced an average value for each child of \$5. Cleveland, Ohio, had 7,840 home gardens, covering an area of 85 acres, and 415 large tracts totaling 90 acres. The estimated value of the 175 acres cultivated by school children was \$79,835.

Youngstown, Ohio, where the chamber of commerce assisted the school officials, reports a valuation of \$1 for every inhabitant, the gardens cultivated by school children producing \$136,920, with an enrollment of children totaling 4,500.

Garden Teachers' Pay in Southern Cities.

School-directed home gardening had a decided effect in reducing the cost of living in many cities in southern Virginia, the Piedmont section of North Carolina, and eastern Tennessee. Three years ago one of the specialists of the Bureau of Education was stationed in this territory to direct the garden activities of the public-school children of the upper grammar school grades. Local boards of education in Lynchburg and Danville, Va., Greensboro, Durham, Raleigh, Salisbury, and other towns in North Carolina, and Chattanooga and Morristown, Tenn., employed garden teachers to work after school on Saturdays and during the summer vacations. These teachers enrolled school children in regular classes, and the production of vegetables in backyards and vacant lots was begun. During the three years the work has been in progress there has been marked increase in enrollment and the value of the product of children's home gardens. At the end of August, 1919, the value of products per child gardener was \$30.35. The average per child varied in different cities. In

Greensboro, N. C., the average income of the 951 children was \$64.47, which, considering the acreage under cultivation, gives a total return of \$622.49 per acre.

In the six cities of Lynchburg and Danville, Va., Greensboro and Durham, N. C., Chattanooga and Morristown, Tenn., 27 teachers were employed to direct the garden work. The actual expense of the garden work in these cities was \$16,983.45, and the market value of the products raised was \$208,930.53.

From an expenditure of \$779.81, the children of Owensboro, Ky., raised food-

stuffs valued at \$33,700. There were 1,324 children enrolled in the garden work in Owensboro, and the Kentucky city is typical of what may be accomplished where such civic agencies as the city commissioners, Rotarians, parent-teacher associations, and women's clubs unite to work for school-supervised gardening under the direction of school officials. The case of Owensboro is likewise interesting because of the fact that a part of the expense money was provided by the Associated Charities of the town, and the value of such cooperation is evidenced by the announcement that not a single child who had a garden became a juvenile offender. The largest amount of vegetables produced by an individual child was \$125, and the average produced was \$20.

In the Pacific Northwest.

The many-faceted life of Seattle, Wash., where school-supervised gardening is considered of prime importance, demonstrates how potent a force gardening may become in the work of Americanization. But not only in those schools of Seattle where a large foreign population must be considered, but in every school in the western city—washed by the waters of Puget Sound, with 60 steamship lines centering at the "Gateway to Alaska"—was gardening promoted as an integral part of the educational life of the community.

The children enlisted in the United States School Garden Army of Seattle not only supported a French orphan



Johnstown, Pa., school-home gardeners make known their achievements through this exhibit in a local merchant's store window.

through the products of one school garden, but throughout the winter have maintained a campaign against insect enemies. A campaign to destroy the tent caterpillar egg bands was inaugurated on December 1, and up to January 15, the children of 29 schools had destroyed 195,089 egg bands, which held an estimated total of eggs of the stupendous number of 6,096,531. Had these eggs been allowed to hatch, the caterpillars, if placed in single file when full grown, would have extended for a distance of 1,100 miles.

"Gold-Star" Gardens in Louisville.

Eight schools recorded a 100 per cent enrollment in Louisville, Ky., and produced garden stuffs valued at \$157,060, representing the work of 17,064 children enlisted in the United States School Garden Army. At the beginning of the garden season, the children were given 16,000 packages of seed by the Congressman of the fifth district of Kentucky. A feature of the school gardens of Louisville was the naming of the gardens in honor of Louisville soldiers who gave their lives in the war. The children evinced their patriotism by the special efforts they lavished on these

"Gold-Star" gardens. The planting of trees was also considered of much importance in the Louisville schools. In all 1,071 trees were planted in the fall, as were 902 tree seeds, including gingho, peach, dogwood, and maple, and 427 cuttings of willow trees. Nature study and gardening is taught in the Louisville schools from the kindergarten to the eighth grade, and the teachers of botany carry on the work in the high schools.

Los Angeles, Calif., had 15,000 children enrolled in school-garden work, and Washington, D. C., reported a total of 16,800. Ten thousand home gardens were planted by the children of Atlanta, Ga., in 1919, an increase of 3,000 over the record of 1918.

School Gardens on Historic Boston Common.

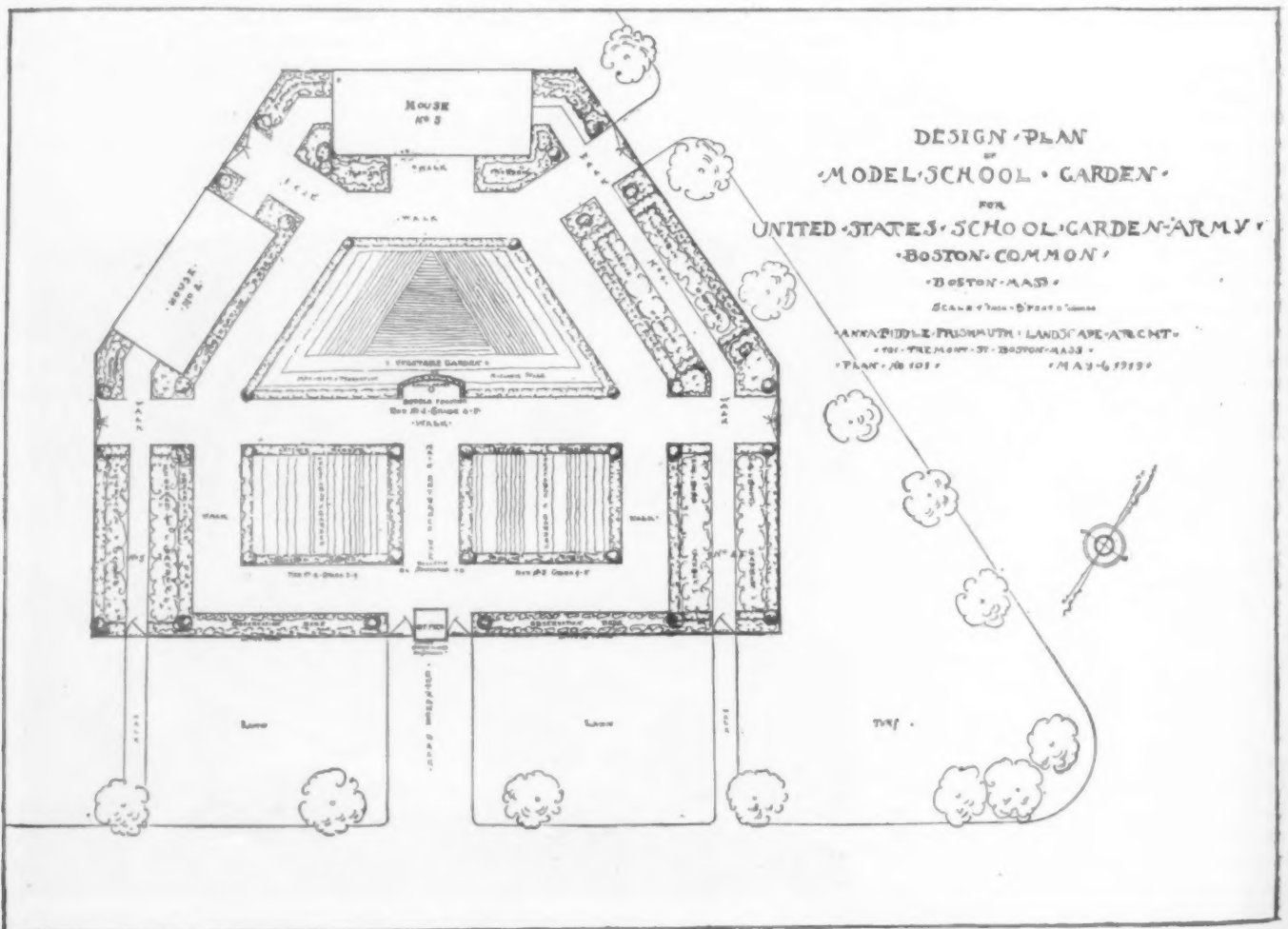
A demonstration garden was conducted by the United States School Garden Army on Boston Common, and congratulations were extended Massachusetts children by the governor of the Commonwealth. Waltham, Mass., was the first city in the United States to award certificates, signed by the Secretary of the Interior, Commissioner of Education, and U. S. S. G. A. director for "Distinguished Garden Service."

The children of Knoxville, Tenn., raised products valued at \$16,263.12, and the newspapers of Utica, N. Y., declared that the children enrolled in garden work in that city "learned more about the proper conduct of a garden than many of their elders, city born and city bred, ever knew or ever will know."

Twelve hundred children of Richmond, Va., cultivated a total of 58 acres, raising products valued at \$22,994.46, and in Reading, Pa., the enrollment in the garden army showed a steady increase, the 1919 enrollment being 7,243 against 6,887 in 1918.

In Denver, Colo., the Housewives League established a garden market to aid the children in disposing of their surplus product.

Texas claims that more cities have introduced gardening as a part of their regular school curriculum than any other State in the Union. San Antonio requires gardening as a distinct subject in its curriculum through the lower classes of the high school. Such cities as Austin, Houston, Dallas, and Fort Worth have introduced the subject of gardening and are recognizing it as a regular part of the school work.



Architect's drawing showing part of historic Boston Common, laid out for demonstration gardens for the U. S. S. G. A. in 1919.

A HUNDRED BASKETS OF VEGETABLES AT FIRST SCHOOL MARKET

Augusta Garden Army Raised \$4,000 Worth in 1919—Original Investment Was \$200

One hundred baskets of vegetables were sold at the first school market of the children enlisted in the U. S. S. Garden Army in Augusta, Ga. On "market day," the children, including representatives from the kindergarten to the eighth grade, lined up at each school promptly at 9 o'clock. In front of each child was a market basket, filled with fresh vegetables. The baskets were artistically arranged, and some of the children had festooned the handles of the baskets with flowers. The "school market" was declared to be "a picture of thrift, energy and patriotism which every Augustan should have seen and encouraged."

The children of the Augusta schools were organized into companies on March 1, 1919, each company having a captain and two lieutenants. The captains had the privilege of appointing three orderlies, and the six little officers with the teacher made the official inspections of the gardens. The teachers in each building received orders and instructions from the teacher specifically appointed by the superintendent of schools as a member of the garden commission. These teachers were interviewed regularly by the supervisor of gardening for the spring term of 1919, and they, in turn, transmitted instructions and orders to the pupil-officers and teachers.

The financial end of the work was taken care of by a contribution from the Rotary Club of Augusta and from other sources, but in all the amount expended was not in excess of \$200. This sum included the compensation of the supervisor for part time work, and the expenditure necessary for ribbons and pins for the service bars.

The result at the end of the garden season of four months showed that the children had raised in each garden more than \$2 worth of vegetables, which had been used at home or sold. The sum of \$2 was a very small and conservative estimate, but even at this small estimate, it was shown that the 2,000 gardeners had raised \$4,000 worth of vegetables. In addition to this amount they carried to their school markets 420 baskets of vegetable products, which had been sold for \$248.52, making a total of \$4,248.52 as the return on the original investment of \$200. This sum represented four months work, and a greatly augmented total is expected when the fall and winter garden returns are in.

The Southern Exposition Fair authorities were so much interested in the garden work of the children that they offered an enticing list of prizes for the best exhibits of vegetables grown by the children and for the best exhibits of canned vegetables.

GIRLS ARE AS GOOD GARDENERS AS BOYS

That girls are as efficient gardeners as boys was demonstrated by the list of awards to pupils of the market garden associations of the public schools of Cincinnati, Ohio, who exhibited their produce at the Carthage Fair. Many of the girls received first prizes.



Helping the tomato vine climb around the trellis.

Pleasant Ridge School captured high honors, having 191 entries of exhibits, on which \$34.25 was won in premiums, with a total number of 328 points. This school also captured the prize of \$8 for the best school display. Mary Dill School, at Carthage, took second honors with 131 entries. Linwood School received the third prize and Madisonville School captured fourth place.

So close was the race between the down-town schools, children of which used the street cars to reach their gardens, that great difficulty was experienced by the judges in making the awards.

NEW ORLEANS CENTER OF GARDEN ARMY ACTIVITY

Flowers, as Well as Vegetables, Produced in 1919—Remarkable School Exhibit

The most notable garden exhibit ever held by pupils of the New Orleans schools marked the close of the 1919 garden season, and the bareness of the big Behrman gymnasium blossomed into fruit and flowers when the garden contest was staged and prizes awarded the children of the United States School Garden Army by the Victory school garden committee.

Vegetables were laid out in tiers, banked with Spanish moss, representing 35 varieties planted and produced by children of all grades. There was an artistic arrangement of rosy new potatoes, golden carrots, pyramids of beans, crisp lettuce, green corn, giant tomatoes, mammoth cabbages, garlic, leeks, celery, endive, charlots, thyme, kale, swiss chard, pole beans, two varieties of peppers, cowpeas, and even peanuts. The Lakeview display, which carried off first honors for the vegetable exhibit and the best-kept school yard, "might have furnished a model for the ideal market stall," said the New Orleans Times-Picayune in commenting on the display.

Practically every garden flower that will flourish in New Orleans was represented in the display. There were larkspurs, cosmos, phlox, daisies, lillies, roses, hydrangeas, nasturtiums, gladioli, petunias, jessamine, ragged robins, pansies, forget-me-nots, and many others.

A bird-house contest was one of the features of the garden work, and everything from straw hats to the old shoe of a soldier had been utilized to make homes for nesting birds. Several of the tiny houses had been planned with an artistic eye, and one of the most complete was a tiny gabled cottage bearing the sign "Peep Inn."

In an address to the children gathered at the presentation exercises, Y. L. Fontenot, State director of the School Garden Army, complimented Miss Mary F. Reames, State collaborator and head of the Nature Study Club, and Mrs. Levering Moore, who heads the Victory school garden committee.

Work at the Beauregard School

Teachers of the Beauregard School, in New Orleans, in referring to the school



It is doubtful if old Boston Common ever had a more impressive lesson in citizenship than this one on planting corn.

garden said the enthusiasm of the children knew no bounds, and that they would work throughout recreation periods and recesses, without thought of play, if the teachers would permit.

The New Orleans Statesman, in describing the Beauregard School garden says: "What can be accomplished by a group of small children, if they are sufficiently interested in a project, is demonstrated by the vegetable garden made by the pupils of the Beauregard School, every bit of which was planted, worked, and cared for by pupils under the fifth grade. On account of the heavy rains during the early spring, and because the ground in the vicinity is low, the children could not begin their garden until very late. The plot of ground was an empty lot covered with weeds a few months ago. It is situated one block from the school grounds and was loaned to the children.

"One of the most interesting features of the garden is the careful, precise manner in which every bed is laid out and divided, and every walk is pounded down and grass free—like a cement walk."

The enthusiasm of the Beauregard School children was matched by other schools in New Orleans. The boys of the La Salle School built a fence to protect their vegetables. Children of the Semmes School worked under great difficulties in the matter of drainage, but succeeded in cultivating a vegetable garden and a hedge garden of old-fashioned flowers. Children of the Paulding School had two plantings destroyed by goats, but triumphed at last and raised a successful crop.

ONE HUNDRED PER CENT INCREASE IN TWO YEARS

Pennsylvania City Had 500 School Home Gardeners in 1919—Exhibits from 14 Schools

"One hundred per cent increase during the last two years" is the record hung up by the children enlisted in school-

supervised gardening in Johnstown, Pa. An exhibit of the garden products raised by children in school gardens and school-supervised home gardens, organized on the plan of the United States School Garden Army, was held at the close of the garden season, with exhibits representing 14 schools. The entries were made by pupils from the third to the eighth grades, and represented school and home gardens in about equal quantities.

Placards placed above the exhibits contained the information that the school gardens cover an area of $3\frac{1}{2}$ acres, divided into 613 plots, having 343 gardens. Announcement was made that 500 children had home gardens. Exhibits ranged from potatoes to strawberry plants with full-grown fruits. Beans, beets, carrots, and tomatoes predominated, but the exhibit included nearly every variety of vegetable that may be grown in Johnstown.

The vegetables remained on exhibit for three days, and were then donated to the Christian Home. The school-garden instructors expressed themselves as greatly pleased with the improvement of the 1919 gardens over those of 1918, and with the interest evinced by the children in the work. Aside from a little too much wet weather for a brief period there was nothing to interfere with the work, and the pupils tended faithfully their individual gardens.



Education in the out-of-doors—That's the first principle of the School Garden Army.

MINNEAPOLIS 1919 GARDENING RECORD ONE OF BEST

School Gardeners Added Thousands of Dollars to City's Food Supply—Under Board of Education

Minneapolis school children far surpassed their previous high record in gardening, according to reports of the garden supervisor. The children were urged to push the garden work not only as a means of acquiring useful knowledge but also as a valuable contribution to the city's food supply. They were told by the garden teachers who inspected the home gardens that every bushel of vegetables raised eased the strain on the country's transportation facilities and aided in the work of rehabilitating Europe. Three thousand pupils were enrolled and neighborhood fairs were held throughout the season. The children cultivated 2,105,549 square feet of ground and sold produce valued at \$24,162. The big "traveling tent," in which the neighborhood fairs were housed, attracted unusual comment throughout the city, and the Minneapolis Tribune, in describing this novel feature of the garden work of the Minneapolis children, said: "There's a different bill on every day in the big traveling tent that has been exhibiting in five sections of Minneapolis, which will pass on to the other six sections of the circuit. A different 'bill' every day, and a new troupe of performers and a new set of 'properties,' picked fresh from the vines, or cut fresh from the stalks, or dug fresh from the hills, every morning before 9 o'clock, when the show opens, and the 'properties' are auctioned off to the patrons when it closes an hour before the noon mealtime. For it's a garden show that is going on—a school garden show that is giving neighborhood market places for the surplus products of the 2,900 boys and girls in the garden army. And it's a 'return date' that the boy and girl exhibitors are now playing, with a performance 'bigger and better than ever.'

"Blue-ribbon specimens from the closing series of neighborhood fairs were grouped at a special school garden exhibit at the State fair—pet squashes, plump tomatoes with Wouter Van Twiller cheeks, hand-polished eggplants, and all."

Five years ago the board of education made its first appropriation for the promotion of school gardening work, and since its institution school authorities say the work has increased by leaps and bounds, and an increasing number of pupils are gaining interest in the project yearly. A corps of specially interested teachers are given time for establishment of the clubs in the spring term, and are

employed by the board for supervisory work during the summer. The school garden records for 1919 are declared by the garden director to be especially remarkable in that they show no falling off from last year when the patriotic motive was so strong an inducement, but instead show steady gains.

AWARDS FOR "DISTINGUISHED GARDEN SERVICE"

Waltham, Mass., was the first city in the United States to issue certificates signed by Franklin K. Lane, Secretary of the Interior; P. P. Claxton, Commissioner of Education; and John L. Randall, Di-



Following the Garden Army instructor's dictum: "Straight rows."

rector of the United States School Garden Army.

The certificates were awarded for "distinguished garden service," and the presentation was made an impressive spectacle, with many invited guests present.

The certificates were also signed by the mayor of Waltham.

A cloth service flag was awarded the children, whose work was directed by Miss Mabel J. Weeks, garden supervisor.

A "garden yell" was improvised by the enthusiastic members of the Waltham garden companies, who gave it with even greater vigor than is customary on the part of college boys.

BALTIMORE PREPARED TO FIGHT COST OF LIVING WITH SCHOOL GARDENS.

"No wonder old high cost of living is wearing a frown these days and looking a bit perturbed as he surveys the 3,724 gardens yielding a bountiful store of vegetables cultivated by as many little soldiers of the School Garden Army of Baltimore," said the Baltimore Evening Sun, which conducted a campaign throughout the summer in the interest of school-supervised home gardens, awarding thrift stamps as prizes.

"Such an enthusiastic, efficient, 'peppy' young army never before enlisted to help Uncle Sam in his big undertaking of 'feeding the world.' As for determination—why, there is not one of them who is not downright sure he will win one of the thrift stamps offered by the Evening Sun for the gardeners producing the best crops.

"Boys and girls are equally interested, and with crops resulting from spring plantings harvested and eaten, or canned and stored away for winter use, the children entered upon the cultivation of their second or 'late' garden crops, under the supervision of Miss Adelaide Derringer, School Garden Director."

The Baltimore Garden Army records revealed some unusual features. For instance, one little girl was promoted to the rank of major, having placed under her efficient direction companies numbering 900 children. This child, Bertha Lentz, won her promotion at School No. 98.

Louis Laseola, having no garden space available under foot, inaugurated a "hanging garden," utilizing an old drier, and cultivating a garden suspended 12 feet in air. The little gardener transported 2 feet of earth to the drier, which was elevated in order that the vegetables might secure a sufficient amount of sunshine, rain, and fresh air, since the backyard in the child's home was surrounded by a high board fence. Among the products of the "hanging garden" was chevril, an Italian herb used for flavoring.

The grand finale of the garden season was held at the Louisa Alcott School where a row of 15 tables held the exhibits. Thrift stamp prizes were awarded the successful contestants, and Mayor Broening, James W. Chapman, president of the school board, Superintendent Charles J. Koch, and Joseph Sparks, National Thrift Stamp representative in Baltimore, were present at the exercises to congratulate the children upon their work.

"YANKEE DOODLE'S GARDEN," DEDICATED TO U. S. S. G. A.

A garden song, written by Frank Braithwaite, of Bridgeport, Conn., has been dedicated to the United States School Garden Army.

With the approval of the superintendent of schools, the song was introduced into the schools. The words are written to a simple, well-known melody, so that young children may be able to sing it.

SCHOOL LIFE

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Editor, W. CARSON RYAN, JR.

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THE MONEY VALUE OF GARDENING

Unlike most school subjects, which must be estimated in terms of deferred payments, school supervised gardening is one subject the money value of which may be computed at the end of each garden season. To be comparable with compilation for other subjects the future pecuniary value of school gardening to the individual is entitled to the same consideration.

The economic return of school supervised gardening is in direct ratio to the efficiency of the plan of organization and the practical training of the teacher. Within certain limits soil and climate are not as important factors as trained teachers. The net average money return per child in the various cities and towns ranges from a few dollars to \$40 or \$50 and a few individual returns reached as high as \$300. There is a gradual increase in the return per child where gardening has been conducted as a school subject in a city for a number of years. During the 1919 garden season the average return per child was \$18 in cities where complete statistics were kept.

The average citizen who observes only an individual or group of gardeners may consider the results petty. When a net average return of \$18 is multiplied by the six or seven millions of city and town school children, who have available garden space and are of garden age, the total seems beyond belief.

Gardening is comparatively a new subject in education. When it is definitely established and fully efficient the wealth that will be produced on the largely unused back yards and vacant lots by the unemployed out-of-school time of city children will exceed the greatest claim that has ever been made for the money value of the subject.

OCCUPATION AND DELINQUENCY

In connection with several surveys, studies have been made of 3,365 cases of delinquency, truancy, and other offenses

of children against law and order. Some general conclusion may be drawn from these investigations. A much larger number of children who commit such offenses live in cities and towns rather than in rural districts. The percentage of children committing juvenile-court offenses is in direct ratio to the size of the city. The ages at which the height of juvenile delinquency occurs is remarkably uniform. In all cases examined more than 60 per cent of the offenders were 11, 12, or 13 years of age. During these ages the offenses are usually of a trivial nature and arise out of play interests and largely because of lack of interesting occupation. Throwing rocks or balls through windows, ringing doorbells, chasing domestic animals of the neighborhood, or stealing nuts and fruits as much to be chased as for the goods themselves are typical examples. Children at the ages of 11, 12, and 13 are in the period of great physical activity which the city environment tends to suppress. Offenses committed by children over 14 years of age are much fewer in number but more serious in character. Many of these more serious offenses might have been checked in a younger period by furnishing interesting occupation and opportunity for healthful play.

In three southern towns where school-supervised gardening has been conducted for three years the juvenile-court records were examined. Of the 298 children arrested only 3 had gardens. In another town only 1 of 150 children having gardens was arrested. Out of over 400 cases of juvenile delinquency only 1 per cent of those who were gardeners had committed offenses.

While these statistics are not complete enough as a basis for definite conclusion, the fact is evident that a child working in his garden is not liable to commit offenses. When our educational system furnishes productive employment of an educational nature to occupy the unemployed time of city children it is safe to predict that juvenile-court offenses will decrease. It may also be a fact that the cost of employing teacher-leaders for this out-of-school time will be less than the cost of courts, detention homes, and probation officers.

GREW OUT OF REAL EDUCATIONAL NEED

The United States School Garden Army has grown out of a real need in education that has been brought about by the growth of cities. With each succeeding census a larger and larger proportion of our population has become urban. In 1910, 46 per cent of the people of the United States lived in cities, and in 1915

the Census Bureau estimated that the urban population had increased to 52 per cent. With this change in living conditions there has not been a corresponding change in school organization. The short school day and long summer vacation were originally planned that country boys and girls might help with the planting, cultivation, and harvesting of farm crops. Under city conditions the same form of economic assistance of the child to the home industry is no longer present. The same general plan of school year, however, has been adopted in cities, except that the school year has been slightly lengthened and in many cases the school day made shorter.

From the standpoint of education for life, the activities and environments of the child when out of the schoolroom are as important as the present form of conscious training received in school. Through the evolution of the race there have arisen demands for development of structure, senses, and instinctive interests that are essential to the best biological development of the individual. The development of the individual through these hereditary influences is an imperative force within the individual, but a force that may lead to conscious education and be used to strengthen it. The needs of education are, therefore, twofold—hereditary and conscious. Nature or hereditary and conscious education must run parallel in order to bring man to his fullest development.

In our schools emphasis is almost invariably laid on an academic and a sedentary form of conscious education. So long as the child lives in the country this may be done more or less with impunity. There the boys and girls have fields in which to roam and hunt, streams to wade, and trees to climb. The very openness and bigness give the opportunity for physical development. The domestic animals, birds, flowers, and landscapes are present in profusion to develop the senses. The growing and care of animals and plants, the possibility for collecting, hunting, building, etc., satisfy instinctive interests. Nature's workshop where hereditary traits have been formed is still present to satisfy the demand of the individual. The country boy not only has the surroundings that develop senses and instinctive interests, but also in his daily life there are required duties that develop him physically and at the same time form habits of industry. Environment and industry added to conscious education of the country have in the past often produced qualities that made for success in mature life.

In the congestion of the city, on the other hand, piles of brick and stone have encroached on the room for physical de-

velopment. These same influences, together with dust and smoke, have been allowed to blot out nature—the sense developer. The instinctive interests of hunting and capture, collection, caring for living, growing plants and animals must go undeveloped or be turned into channels that often conflict with man-made laws. If biological structures and interests are of value they should be conserved to city children. Education alone can save them; if not the schools, then some other agency must and will undertake to meet this need.

For the past decade there has been a growing feeling on the part of both the general public and of the school fraternity that the biological aspect of child culture has been too long neglected by city education; that under the new city conditions new methods should be evolved that will include development by the school of both biological and social sides of the child. This does not mean that the present standards of conscious education shall be lowered but rather that the schools shall recognize hereditary demands as of equal importance in the development of the individual. Education is the business of the schools. Under city conditions the demands for conservation of desirable traits is insistent, and this branch of education should not be delegated to any other organization. As stated previously, development of the two forms of education must be parallel and conducted by the same agency if education is to be complete and efficient.

School-supervised gardening as promoted through the United States School Garden Army is only one of the many productive educative occupations that may be fostered as a school and continuation school activity. Its definiteness and practicability have gained favor for it from the first. The garden helps to develop the physical being, the senses, and gives opportunity for the play of strong instinctive interests. Because of the rapid expansion of gardening as a school subject and the success with which it is meeting it may well be the subject that paves the way to a better balancing of the biological with conscious education.

J. L. RANDALL.

WHAT THE EDITORS SAY ABOUT THE GARDEN MOVEMENT IN THE SCHOOLS.

"No doubt can be felt," says the Washington Star, "as to the value of the school gardens in the training of the children in a useful way, and the inculcation of the habits of thrift and industry. * * * The money proposed to be expended for this purpose can not fail to be a rich investment in better future

citizenship and greater present usefulness on the part of the children. The child who is trained in gardening has a more definite and concrete sense of property rights than another who does not participate in the cultivation of the soil. It has been found that every child who takes part in school garden work looks forward to this service with pleasure, and it adds greatly to the efficiency of schools in other lines."

"Children enlisted in home gardening, under trained supervision, have in a little more than a year produced food stuffs valued at \$48,000,000. This tremendous sum tells only partially the results of the concentration of little hands to practical work. The educational value of the enterprise far surpasses the dollar and cents tabulation," says the Boston Post, which adds, "The land as the

natural heritage of all the people requires the most far-reaching knowledge possible of what it can do, and so imposes an obligation of paramount importance to all.

"There can be no real poverty and distress in a community of efficient farmers. Mother Nature not only provides the means for them to live, but puts happiness into their existence. There is no occupation under the sun more beneficial to body building and bestowal of health than comes a reward in part to those who go afield with plow and reaper.

"There is none of the curse of 'child labor' in this. The youngsters went on the job joyfully and willingly, without a thought of profit. The 'good fun' netted millions and gave to the youthful workers invigoration, clear brains, and ability to do things. They had the blessed opportunity of living in the open and of daily seeing the results of their efforts in the growing crops. They had supreme satisfaction of creating something, one of the greatest known incentives to spur on increased endeavors.

"Even the most enthusiastic promoters of the movement must have been surprised as well as gratified," says the Detroit Free Press, "by the Department of the Interior's announcement that in the little more than a year the work had been in existence the United States School Garden Army produced foodstuffs valued at \$48,000,000. * * * However, the real value of the experiment lies not so much in the money represented as in the possibilities it suggests, and the renewed emphasis of the fact that little things count in the final reckoning.

"If the idle land adjacent to the centers of population that now produces nothing more profitable than real estate signs and invitations to eat Hokum's hominy were cultivated there would be little occasion to worry over the fact that potatoes were rotting in warehouses halfway across the country because of inadequate transportation facilities. Householders would be spared the expense of having the product of near-by fields shipped hundreds of miles and back again before being put on local counters.

"Probably there is no human vocation in which the child can so healthfully, pleasantly, and willingly take his first lesson in helping to pull the family load as in tilling the soil," says the Salt Lake City News. "In this oldest, noblest, and best of pursuits there is none of the grinding din of the mills, the sweaty grime of the shop, or the dark burial of the mines—all regarded as unfit employment for the growing child.

"Promoters of school gardening are enthusiastic over the nation-wide success of the United States School Garden Army," says the Boston Herald. "The story of the school gardens of Massachusetts is well known. All in all, it is reasonable to suppose that if this movement persists the attitude of the people toward certain phases of our national life will be changed in a generation or more. Optimistic advocates of the movement declare that 'within 20 years the whole tendency of the population to congregate in close quarters in cities will be altered and that every family will aim to have a separate habitation and a piece of ground large enough for at least recreational gardening.' 'Tis a consummation devoutly to be wished."

Officers of the United States School Garden Army

FRANKLIN K. LANE, Secretary of the Interior.

PHILANDER P. CLAXTON, Commissioner of Education.

JOHN L. RANDALL, Director.

HELEN FITZ RANDOLPH, specialist, news bulletins and pageantry.

Northeastern States.—Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and District of Columbia.

CLARENCE M. WEED, regional director.

DONALD J. MCINTIRE, assistant regional director.

Southern States.—Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.

FREDERICK A. MERRILL, regional director.

SAMUEL C. WILSON, assistant regional director.

Miss ETHEL GOWANS, specialist in field demonstration.

Central States.—Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

LESTER S. IVINS, regional director.

EVERETT F. MURPHY, assistant regional director.

Western States.—Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

CYRIL A. STEBBINS, regional director.

AROUND THE MAP WITH THE SCHOOL GARDEN ARMY

Items from Everywhere That Show What the Boys and Girls in the City Schools Are Doing to Help Feed the United States and the World.

Parents and Children Work Together in California

San Diego, Calif., reports that through the medium of the school-supervised home garden, educational authorities have joined hands with parents in endeavoring to instill habits of thrift and industry in young people. More than 1,600 San Diego children wear the emblem of the U. S. S. G. A., and 24 schools united in an exhibit and sale of home-grown vegetables, the proceeds of the sale being given to the Junior Red Cross. Chinese cabbage, Australian lilacs, flat Dutch cabbage, strawberries, and Boston narrow squash were included in the exhibit.

When the children of Fresno, Calif., held an exhibit of their garden products a written account of the raising of each vegetable was appended to the entry. The following example of the literature accompanying the exhibits was pinned to a prize-winning pumpkin, which was designated as "man-size."

"These pumpkins were raised from seeds which came from pumpkins which mother had last Thanksgiving. I washed the seeds and planted the hills, which contained 8 seeds in each hill. These were watered twice a week with city water. There are 2 of them, and I still have 10."

Among the citizens cooperating with the garden supervisors in San Jose and Santa Clara County, Calif., was Victor E. Metcalf, ex-Secretary of the Navy. The splendid record made by the U. S. S. G. A. in Santa Clara County and California cities is attributed to the cooperation given the educational authorities by the State council of defense, 30 great fraternities, and the Protestant and Catholic churches. Associate Justice C. D. Wilbur secured the aid of the Protestant churches in the work in California, and Archbishop Hanna bespoke the cooperation of Catholic churches. Associate Justice Henry A. Melvin obtained pledges of cooperation from the fraternal organizations, and Mrs. H. B. Cable enlisted the California Women's Associations.

Ten-Inch Beets in Colorado

The Chamber of Commerce of Colorado Springs, Colo., opened its offices for the exhibit of the garden products of children enrolled in the Colorado Springs U. S. S. G. A. division. Cash prizes, copies of Millet's "The Gleaners," and glass-top jars were awarded as prizes for the best exhibits, and for the best-kept garden



Harvesting Swiss chard—One of the best crops for school-home gardens, by the way.

records and the best garden stories trips to the State Fair at Pueblo were given.

Tomatoes weighing more than a pound each, cabbages measuring 24 inches in circumference, and beets with a 10-inch "waist measure" were among the garden products which attracted unusual attention at the exhibit of the U. S. S. G. A. company of the Maria Mitchell School, Denver, Colo.

So impressed were adult visitors by garden products exhibited that they eagerly sought advice from the juvenile

gardeners as to the methods they had employed.

Silver Cups as Prizes for Connecticut Children

Two silver cups were presented as prizes at the home gardens exhibit of the children of Hartford, Conn. The exhibit was held at the Municipal Building, under the direction of the superintendent of home gardens. One cup was awarded for the best exhibit of garden products, and the other for the best exhibit of canned vegetables and fruits.

Atlanta, Ga., Continues Steady Growth

The steady growth of the school-supervised garden movement in Atlanta, Ga., is indicated by the increase in the number of gardens planted in 1919 over those planted in 1918. The city school director of gardening reported 10,000 gardens in 1919 as against 6,540 in 1918.

It is estimated that the value of products raised in the gardens of the children of the Atlanta schools will total at least \$75,000. In arriving at these figures, the results of the 1918 gardens were taken into account, as in 1918 the 6,540 gardens planted by the grammar-school pupils of the city made an average profit of \$7 each, or a total of approximately \$52,120.

The garden supervisor says: "The results some of the children obtained this year were remarkable. Each school had an exhibit."

Commenting upon the growth of the Atlanta school-supervised garden movement, the Atlanta Constitution says: "It is gratifying to all who love children, character, and the community, not only in that it bespeaks a degree of thrift and industry that inevitably leads to pecuniary aggrandizement, but because it is a sure sign of character building on a high plane and portends an exalted standard of citizenship in the future."

Although 1919 was the third year that gardening had been taught in the Atlanta schools, it was not until April of last year that provision was made for paying the salary of a supervisor. For about two years previous to April, 1919, the supervisor's salary was paid by the head of the Atlanta Retail Credit Men's Association, who, being an enthusiastic advocate of



That Boston Common garden again. The sixth-grade girls had this part.

home gardening, offered to pay the expenses for a time, believing, he said, that when the results were seen the work would be kept up. The results have abundantly vindicated his belief.

Twenty Thousand Onions for an Illinois Celebration

The United States School Garden Army detachment of the Canton, Ill., schools was called upon to furnish 20,000 onions for use in preparing the great dinner given on soldiers' return day, June 25. The onions were purchased from the "soldiers of the soil," since the adults in charge of the festivities felt it quite appropriate that the garden army should have a practical part in welcoming the victorious soldiers of the Republic.

Arrangements were perfected through the captains of the U. S. S. G. A., the quota for each room or section being placed at 35 dozen.

The superintendent of schools at De Kalb, Ill., reports that enthusiasm among the garden students of the city schools was greater in 1919 than ever before, each school having a garden. The Glidden School, which was, perhaps, the most successful, realized a profit of \$140 on its school garden. Money derived from the sale of garden products of the school gardens is used for the purchase of books, pictures, and other needs of the schools.

The Heritage of Soil in Iowa

Ninety-two prizes were awarded in the annual garden exhibit of the children of the

Des Moines, Iowa, schools. The exhibit was held in connection with the midwest horticultural exposition.

"The soil of Iowa is a great heritage, and the children of the State should be taught the great truths about soil and plant life," says a garden supervisor of Fort Dodge, Iowa, in reporting that two schools alone cultivated 2½ acres in school gardens.

Chamber of Commerce on the Job in Wichita

The Chamber of Commerce of Wichita, Kans., has fostered the U. S. S. G. A. plan

through the schools, and garden markets have been held weekly throughout the season. The first market held netted the children \$27, and as much of the produce brought was for exhibition purposes in connection with the prizes offered, the proceeds of the market represented only a partial valuation. The chamber of commerce provided the funds to pay a garden supervisor, who began his work in February, 1919.

A "garden fair" was held at Parsons, Kans., in September, at which the school children exhibited the result of their garden work. The best entries were selected for exhibition at the State fair.

School Gardeners Win Adult Fair Prizes on Merit

Following the school and school-supervised home garden exhibit at Holyoke, Mass., a few of the first and second prize exhibits were brought to West Springfield and entered in competition with vegetables from all of the Eastern States at the Eastern States Exposition.

Judged entirely on the merits of the exhibits, without taking into consideration the fact that the vegetables were raised by children, one first prize, one second prize, and several standard awards were given the Holyoke display, which was made by members of the United States School Garden Army. A first prize on potatoes was given to Louise Clarenbach of the high school, a second prize medal for turnips was awarded Victor Waring of the Kirtland School, and standard award ribbons were given other pupils.

The Pawtucket School Garden regiment, Lowell, Mass., at a conference of "regi-



Going to market with school-home garden products, Cincinnati, Ohio.

mental officers" reported unusual activity in the garden work of the privates, and out of 368 gardens planted by members of the United States School Garden Army, the lieutenants and captains reported only six that had not been weeded.

The most conspicuous exhibit at the annual exhibition for home and school gardeners, held at the Horticultural Hall, Boston, Mass., was a display of fresh vegetables and canned goods shown by pupils of the Mary Hemenway School district, Dorchester.

"The Open Gate to Opportunity," as its sign read, occupied the entire length of the lecture hall platform. It was arranged under the direction of the supervisor of school gardens and her assistant, a pupil of the Hemenway School, and the prize gardener of Suffolk County.

City Commission Backs Garden Children in Michigan Town

Children of the Cadillac, Mich., schools, enrolled in the United States School Garden Army, held an exhibit of early vegetables at the chamber of commerce offices, and displayed the products of late gardens at the fairgrounds.

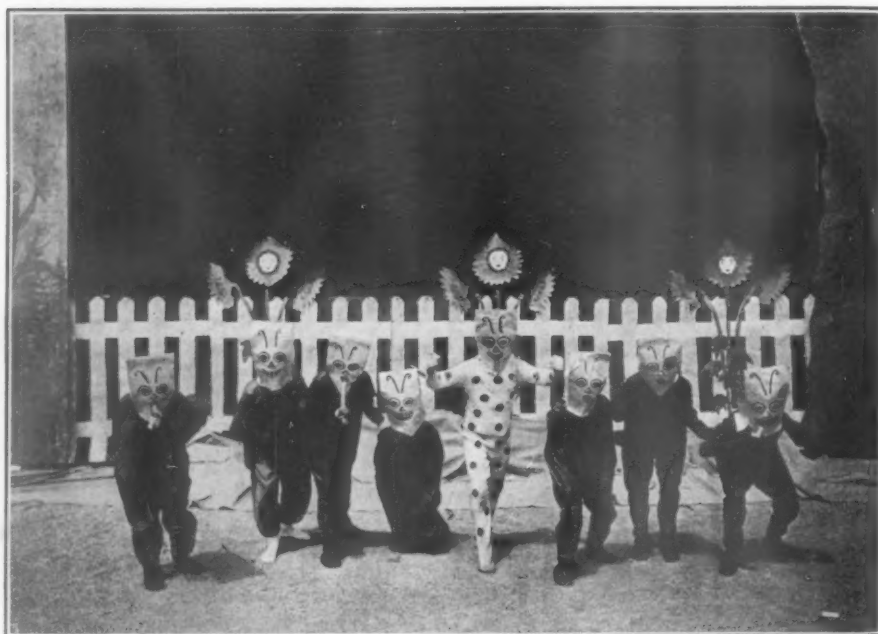
The city commission, chamber of commerce, and members of the Penelopean Club cooperated with school officials in planning and conducting the garden work in Cadillac, giving financial support and otherwise assisting the movement. Cash prizes ranging from \$2.50 to \$5 were awarded at the exhibits.

More Than Four Thousand Planted Gardens in Superior, Minn.

Superior, Minn., reports a greatly augmented enrollment in the garden ranks of 1919, as more than 4,000 school children planted gardens and competed for prizes offered by the Merchants' Association and the Tri-State Fair committee. More than \$500 in prizes was awarded to children who made the greatest success in the raising of vegetables, under the supervision and encouragement of nine directors appointed from the city schools.

Fifteen hundred boys and girls of Duluth, Minn., had home gardens under the supervision of the garden department of the public schools. Each school building had two companies, one company composed of the boys of the schools and the other composed of the girls. Children having no home plot were provided with a plot in the centralized gardens upon payment of 25 cents rental, which covered the cost of plowing.

The board of trade offered \$10 to each school as a prize for the best garden grown. A silk flag and pennant was given the school making the best showing.



"Chewers and suckers" are about to raid the gardens in this scene from a Washington, D. C., garden play. But if you'll look at the picture at the bottom of the next page, you'll find—

A Responsible "Post Commander" in Missouri

St. Joseph, Mo., reports a fine esprit de corps in the ranks of the garden army. The title of "Post Commander" was conferred upon the lad entrusted with a general supervision of the gardens, under the direction, of course, of the garden supervisors. Referring to the serious manner in which the young pupil officers assumed their duties as garden inspectors, the St. Joseph News Press says: "The school garden army moved forward against the garden pests in St. Joseph in a strong phalanx. From week to week Post Commander Venquist reviewed his divisions. He was greatly encouraged with his forces in general and, true to the ethics of the soldier, if any of his rank and file did not measure up to his standard, he did not publish it to the world. He was enthusiastic over the progressive members of his army, and proudly set down a good mark for every promising garden which he inspected. When asked the names of some of his prize gardeners he promptly produced a business-looking book and, turning to the proper pages, said: 'Among the best gardens I have listed is that of Francis Shambeau, of the Longfellow School. He has a garden of extraordinarily good tomatoes. The plants are pruned and promise a fine yield. Another exceptionally good garden is an acre potato patch cultivated by Floyd Hesley. Floyd's father desired him to have some real responsibility, and furnished the ground, seed, and a spraying mixture. The expense amounted to about \$50. Floyd, who is enrolled in the garden army, is to have one-half of the proceeds,

and I think the yield may reach 235 bushels.'

"Floyd," said Post Commander Venquist, "is a private in the U. S. S. G. A., but his younger sister, Carolyn, is a lieutenant."

Montana School Gardeners Carried Water More Than 2 Miles

With all the courage and determination of their pioneer ancestors, children of the Dawson School at Butte, Mont., carried water for the irrigation of their gardens more than 2 miles. The pluck and persistency of the members of the School Garden Army in the Dawson School and other schools in Butte were rewarded, as Superintendent Maddock states that although the season was less favorable for gardening than any in recent years, the quality and quantity of the produce was fully up to the standard, due to the greater efforts expended.

Pageant as Part of Garden Exhibit in New Hampshire

In connection with the school-garden exhibit held by pupils of all the elementary grades of the schools of Portsmouth, N. H., an impressive pageant and historical spectacle were staged. In one corner of the exhibition grounds a typical Indian camp was erected with a wigwam and field of corn. Twelve boys and equal number of girls, each attired in Indian costume, presented a dramatization of "Hiawatha," giving special emphasis to the Longfellow version of the legend of "Mondamin." The children taking part in the Indian episode were

from the third and fourth grades of the school.

Flanking the Indian village was a Pilgrims' Village, and here was given a pageant of the Pilgrims' Thanksgiving, which was presented by pupils of the fifth and sixth grades, dressed in costumes representing the Pilgrim forbears.

In the opinion of the public attending the exhibit and pageant the vegetables displayed were no less interesting than the dramatic features of the celebration, as the vegetable exhibit was declared to be a revelation to those who had not watched the work of the young people in their gardens.

Specimens of garden produce ranging from a head of lettuce to a huge watermelon were displayed.

Competed for New Jersey National Bank Prize

Five hundred and fifty school children of New Brunswick, N. J., enlisted in the United States School Garden Army, and registered their vegetables, produced in home gardens, for competition in the garden contest for prizes awarded by the National Bank of New Jersey. In order to help and encourage the young gardeners a committee of volunteer visitors, numbering 60, was formed to work under the schools in supervising the gardens. This committee of visitors inspected the home gardens, made suggestions, and distributed the window flags, badges, etc., of the United States School Garden Army.

"One of Most Interesting Events in History of the City," is North Carolina Report

The first exhibit of the work of the pupils of the United States School Garden Army in Charlotte, N. C., was declared to be one of the most interesting events in the history of the city. The exhibit at the auditorium attracted large crowds of citizens and patrons of the schools, and the judging of the displays created much enthusiasm on the part of the children, more than 100 of whom had exhibits.

In addition to the garden exhibition, a pageant was presented in which several hundred children participated. Mayor McNinch delivered an encouraging address to the children, complimenting them on their work, and declaring his intention to offer a loving cup next year for the best school garden work.

The courthouse at Elizabeth City, N. C., was the scene of the vegetable exposition staged by the successful Garden Army boys and girls of the community.

The annual school garden exhibit of the children of Asheville, N. C., was held at the board of trade rooms, and prizes were awarded. The exhibits were judged

according to perfection, uniformity, and variety, and prizes were awarded by Mayor Gallatin Roberts. In order to make the event of interest to every child, special prizes were awarded for the children who had only one kind of vegetable to show.

Nebraska City Officials Interested

In perfecting the organization of the United States School Garden Army in Omaha, Nebr., two captains were appointed, one for the girls and the other for the boys. There were four first lieutenants, three boys and one girl; five second lieutenants, three boys and two girls. The South Side Woman's Club agreed to patronize the school markets, established for the sale of surplus products, and Mayor Smith gave consideration to the establishment of a market stand with accommodations for at least 12 gardeners to be placed at Twenty-fourth and N Streets.

A Dollar's Worth of Foodstuffs for Everybody is Ohio City Record

One dollar's worth of foodstuffs for every man, woman, and child in Youngstown, Ohio. Such was the record of produce raised by the school gardeners of the Ohio city, as the estimated value of the children's garden was announced as approximately \$136,920.

The showing made by the children was the subject of editorial praise. A Youngstown paper said: "It's a splendid showing and is commendable even aside from the monetary value of the crop produced. With farmers flocking to the cities and becoming consumers the scarcity of foodstuffs is becoming pronounced. Some of

the hoarding we protest against is non-production. The day when everyone had a garden patch and the young of the family were taught gardening at home is almost past among our American born. The school gardening system is an excellent substitute."

One of the most flourishing of the many flourishing school gardens in Cleveland, Ohio, was that of the children from St. Peter's Parochial and Waring Schools. The entire tract was donated to the use of the children by Charles Lathrop Pack, president of the National War Garden Commission, the owner of the land. The tract, which is located at Perkins Avenue and East Thirty-third Street, was divided into plots 20 by 30 feet, and the best of the products raised were sent to the State Fair at Columbus to compete for prizes.

The annual school garden exhibit of the children of Akron, Ohio, was held at the armory, where the young gardeners competed for cash prizes and the silver loving cup awarded by the Akron Beacon-Journal. The silver trophy is intended to be held by the school winning it until the succeeding fall. The school winning the cup for three successive years will then hold it permanently. Individual prizes were awarded to the children having the four best gardens at each school.

South Carolina School Gardeners Were Busy

Membership in the garden army at Sumter, S. C., was limited to children between the third and seventh grades. One hundred and fifty enrolled, and of



Uncle Sam and the Garden Army ready to meet the invading bugs and worms with the weapons of the modern gardener.



Scene from School Garden Army pageant presented in Buffalo, N. Y.

this number 75 persevered to the close of the season, evidencing great interest and enthusiasm in the work, although many of them had much to combat in the way of poor soil and lack of fertilizers and implements.

The 75 children cultivated, in all, over 3 acres of land, an average of 1,942 square feet to the garden. The city superintendent of schools arranged to have ground back of the library put into cultivation for a fall garden, and to stimulate interest the civic club offered \$50 in prizes, which, after a month spent in careful inspection of all of the gardens, was divided into 16 prizes, which were awarded the little gardeners at a public ceremony on the courthouse steps.

School children of Columbia, S. C., who enrolled in the United States School Garden Army, planted 8 acres in gardens, according to reports of educational authorities in charge of the work. Four hundred and fourteen pupils were enrolled and when their first garden fair was held the exhibits converted the courthouse plaza into a mecca of green vegetables.

Under the instruction of the garden supervisor at Rock Hill, S. C., 3½ acres were planted in school gardens by the children enrolled in the United States School Garden Army. The acreage represented 120 plots.

"Curb Markets" in Knoxville, Tenn.

"Curb markets," an innovation in Knoxville garden circles, were held during the season by the children of the Knoxville United States School Garden Army companies, and vegetables and

flowers were combined in an attractive display.

The regiments of 19 schools were represented, and the patrons of the market included many members of the Parent-Teachers' Associations. The Mountain View School offered a regimental exhibit.

Utah Garden Army Soldiers Fight Drought

Intensive cultivation was used to combat the drought by children of the Ogden, Utah, garden companies. The untiring work of the children saved the majority of the gardens, according to the report

of school officials. The garden supervisors held numerous meetings with the pupils-officers of the United States School Garden Army.

The young gardeners of Salt Lake City met severe and unexpected obstacles, chief of which was the shortage of water. Encouragement was extended to the children, however, and the children evinced real pluck in meeting the situation.

Richmond and Roanoke Help Put Virginia on Map in Garden Army Work

Twelve hundred school children of Richmond, Va., enlisted in the United States School Garden Army, and a total of 58 acres was cultivated, according to the report of A. L. Thoms, principal of Ginter Park School and director of gardens for the school system.

The value of products consumed in the homes of the producers was estimated at \$16,981.45, while that sold amounted to \$2,528.43, and the amount canned was \$3,484.58, making a total of \$22,994.46 as the result of the work of Richmond children during the garden season.

It was estimated by the judges who visited the gardens of the children of Roanoke, Va., enrolled in the United States School Garden Army, that the combined value of all the vegetables produced totaled \$10,000. A special prize was awarded the girl having the best garden, and a similar prize was given to the boy adjudged to have secured the greatest success in garden work. The



Cold frames—the things that mark the difference between the garden recruit and the honest-to-goodness Garden Army veteran.



The Boston Common garden at the height of the growing season.

best garden in each company was likewise signalized.

The Roanoke News, in commenting on the work, said: "The United States School Garden Army has been a decided success in Roanoke, and in no other movement that has been started among the school children have they taken a greater interest or shown more enthusiasm."

Competed With Products at Big Fair

Vegetables which were raised by the children of the U. S. S. G. A. in the South Tacoma, Wash., schools were sent, in some instances, to compete with products exhibited at the big Puyallup Fair.

When the Sheridan School, of Tacoma, Wash., had its district show and school fair at the close of the garden season,

"the big hall was decorated lavishly with the banners and insignia of the United States School Garden Army conspicuous everywhere, yielding precedence only," in the words of the Tacoma Ledger, "to the national colors and to the service flag, with its 48 blue and gold stars, in the place of honor, in the center of the hall."

Twenty-four Varieties by One West Virginia Garden Army Soldier

Twenty-four varieties of vegetables were raised by one member, Edwin Harold Baber, of Huntington, W. Va., garden army, who had under cultivation three lots, totaling more than 12,000 square feet. In addition to the many vegetables under cultivation by this young gardener, broom corn was raised and a border of flowers planted about the entire garden.

Wisconsin City Boy Reports "Young Farm Under Cultivation"

Valentine Calvin, 14 years old, a member of the Beloit, Wis., United States School Garden Army division, is reported as having had "a young farm under cultivation." He had 3,600 square feet under his care, and as he required assistance, he hired labor, in a businesslike manner, keeping a record of all expenses, as well as of the produce he raised. He practiced succession cropping, having no idle land throughout the season.

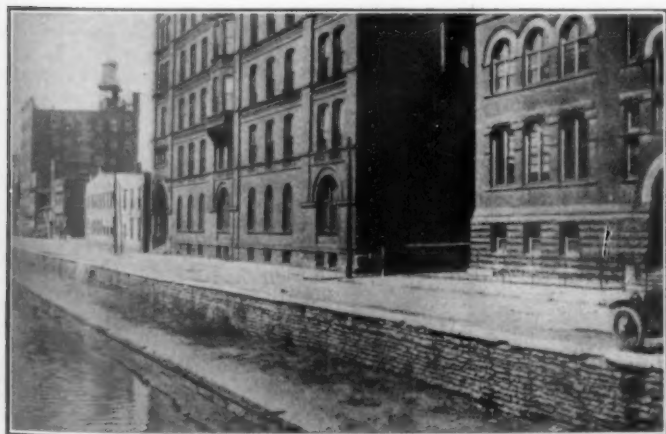
Ever-bearing strawberries, black, red, white, and yellow pop corn, peanuts, and sorghum were among the unusual products included in the "harvest fair" held at the auditorium, Eau Claire, Wis., when garden tools and other prizes by the merchants of Eau Claire were awarded.

The Eau Claire Leader, in referring to the exhibit, says: "Although this year's gardens were entirely the work of school children, while in last year's war gardens whole families united, the exhibits of yesterday were the finest ever shown on a similar occasion."

Parade Concludes Wyoming Work

Four thousand different exhibits were entered in the school garden show conducted by the Cheyenne, Wyo., division of the United States Garden Army, and throughout the afternoon and evening of the exhibit the big hall in which the garden products were displayed was thronged with visitors.

The exhibit was preceded by a parade in which the Boy Scouts and a drum corps led. The children taking part in the parade carried banners, cornstalks, and sunflowers. The representation of central school was considered especially effective. Two burros, decorated with chains of flowers, were an interesting feature, while streamers of flowers extended backward from the school banner the entire length of the marching lines of central-school pupils.



The unsightly canal bank at Cincinnati, Ohio—Typical city bareness and ugliness.



The same canal bank after the Garden Army soldiers of a local school made it bloom with flowers.

GARDEN MANUALS FOR DISTRIBUTION TO TEACHERS

Manuals of garden lessons adapted to the five climatic zones of the United States have been published by the Bureau of Education. These manuals are sent free to teachers. They have been adopted in a great many cities and towns, and in some cases by entire States. They should help greatly in making gardening a recognized part of the course of study in all schools. A short description of each publication is given below.

Northeastern States

Three pamphlets have been printed for use by teachers in the Northeastern States in the work of the School Garden Army. The first of these is a manual of vegetables, with more than a hundred lessons upon various phases of planning gardens and growing crops. It is divided into 10 sections, as follows: Planning the garden; Soils; Enriching the soil; The seed; Planting the crop; Growing the crop; Garden crops; Garden pests; Gathering and disposing of the crop; Fall gardening.

The second is a manual treating of flowers in a similar way, illustrated by many photographs of flowers as adapted to school use. It includes the results of many years' experience in growing bulbs, foliage and flowering plants in connection with school-supervised gardening.

The third pamphlet is devoted to courses in school-supervised gardening, and includes outlines for the first six grades, with definite suggestions upon various phases of nature study and gardening for each grade. The most important of these courses is entitled "A course in gardening based on nature study for the first six grades of the elementary schools," and this course is arranged by seasons and subjects in such a way that it can be followed by any teacher.

Southeastern States

"Lessons in school-supervised gardening for the Southeastern States" contains 80 practical garden lessons. It is divided into eight sections: Planning the garden; Soil preparation; Enriching the soil; Seeds; Planting and care of the crop; Garden crops; Enemies of the garden; Harvesting and use of crops.

Mimeographed outlines for teachers are being issued to cover the fall, winter, spring, and summer seasons. A list of vegetables to be planted in each climatic zone by months and methods of planting each crop are issued in tabular form.

"Home gardening for city children of the fifth, sixth, and seventh grades" is the result of three years' experience of

the special field demonstrator in Virginia and the Carolinas. This manual is prepared on the project basis and is used as a textbook in many Southeastern cities.

Southwestern Region

The "Garden Manual for the Southwestern Region" contains 84 lessons adapted to the climatic conditions and constituting a year's work in gardening.

Teacher outlines for the four garden seasons of the year are issued at the beginning of each quarter to accompany this manual. Separate outlines are prepared for grades four, five, six, and seven. The suggestions for each school term are designed to be timely and practical.

Forty lessons in gardening are included in "Lessons in Gardening for the Southwestern Region." This publication is adapted for the use of teachers who wish to conduct the work during the second school semester and summer vacation. It is also adapted to use in schools giving one lesson per week throughout the year.

Manuals on fruits and flowers are now in preparation.

Central States Region

"Lessons in Gardening for the Central States Region" have been brought together in Garden Manuals Nos. 1 and 2. Manual No. 1 deals with "Getting the garden ready and planting and caring for crops." Manual No. 2 is divided into "Planting and caring for crops" (vegetables not covered in No. 1), "Preventing

GARDEN ARMY ISMS.

By C. M. WEED.

A cabbage grown is a quarter saved.

Spare the spade and spoil the crop.

Weed in haste and pull up the crop.

Be sure you're right then hoe ahead.

The good gardener is a good citizen.

A hoe in the hand is worth two in the shed.

It's an ill wind that blows the moths about.

When the worm turns be sure he finds plenty of poison on the leaves.

The straight and narrow garden path is better than the wide and crooked one.

Neither the ant nor the grasshopper is as wise as the garden army soldier who stores up plenty of carrots.

and controlling insects and plant diseases," and "Getting ready for next year's crop." These two manuals constitute a year's course in vegetable gardening.

A teacher's outline is issued at the beginning of each quarter to accompany the manuals.

Western States Region

A manual of school supervised gardening for the Western States is now being printed. This manual is divided into two parts: Part one contains 48 practical garden lessons dealing with the problems peculiar to the Western States; Part two, "Suggestions to teachers," contains outline courses of study, suggestions for organization and plans for keeping up interest in garden work with children.

PRICES ON UNITED STATES SCHOOL GARDEN ARMY PUBLICATIONS WHEN BOUGHT FOR PUPILS.

(Manuals are free to teachers).

A Manual of School Supervised Gardening for the Northeastern States. Part I. Vegetables. 10 cents; 1,000, \$90; each additional thousand, \$55.

A Manual of School Supervised Gardening in the Northeastern States. Part II. Flowers. 5 cents; 1,000, \$45; each additional thousand, \$25.

Courses in School Supervised Gardening for the Northeastern States. 5 cents; 1,000, \$28; each additional thousand, \$18.

Forty Lessons in Gardening for the Northeastern States. 5 cents; 1,000, \$42; each additional thousand, \$30.

Garden Manual for the Southwestern Region. 10 cents; 1,000, \$60; each additional thousand, \$40.

Lessons in Gardening for Southwestern Region. 5 cents; 1,000, \$39; each additional thousand, \$26.

Lessons in School Supervised Gardening for the Southeastern States. 10 cents; 1,000, \$75; each additional thousand, \$45.

Lessons in Gardening for the Central States Region. Garden manual No. 1. 5 cents; 1,000, \$30; each additional thousand, \$18.

Lessons in Gardening for the Central States Region. Garden manual No. 2. 5 cents; 1,000, \$30; each additional thousand, \$18.

Home Gardening for City Children of the Fifth, Sixth, and Seventh Grades. 10 cents; 1,000, \$102; each additional thousand, \$60.

The Spring Manual of the United States School Garden Army. 5 cents; 1,000, \$21.50; each additional thousand, \$13.

Twenty-three children, eight of whom are girls, shared in the cash prize awards given by Supt. Downes, of Harrisburg, Pa., for garden work during 1919. Honorable mention was given 12 children.